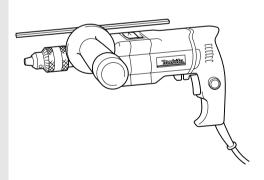


# **Hammer Drill**

20 mm (3/4") MODEL HP2030 20 mm (3/4") MODEL HP2031





#### INSTRUCTION MANUAL

#### **⚠ WARNING:**

For your personal safety, READ and UNDERSTAND before using. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

www.makitatools.com

#### **SPECIFICATIONS**

Model		HP2030		HP2031	
Speed		High	Low	High	Low
Capacities	Concrete	20 mm (3/4")		20 mm (3/4")	
	Steel	8 mm (5/16")	13 mm (1/2")	8 mm (5/16")	13 mm (1/2")
No load speed (RPM)		0 - 2,900/min.	0 - 850/min.	0 - 2,900/min.	0 - 850/min.
Blows per minute		0 - 32,000	0 - 9,400	0 - 32,000	0 - 9,400
Overall length		372 mm (15-5/8")		388 mm (15-5/16")	
Net weight		2.3 kg (5.1 lbs)		2.5 kg (5.5 lbs)	

- · Manufacturer reserves the right to change specifications without notice.
- · Specifications may differ from country to country.

#### **GENERAL SAFETY RULES**

USA002-2

(For All Tools)

#### **⚠ WARNING:**

**Read and understand all instructions.** Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

#### SAVE THESE INSTRUCTIONS

#### **Work Area**

- Keep your work area clean and well lit.
   Cluttered benches and dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

#### **Electrical Safety**

- 4. Double insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
- Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
- When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

#### **Personal Safety**

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- 10. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

- 11. Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- 12. Remove adjusting keys or wrenches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- 13. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- 14. Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. Ordinary eye or sun glasses are NOT eye protection.

#### **Tool Use and Care**

- 15. Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- 16. Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- 17. Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- 18. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- 19. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- 20. Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.

- 21. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- 22. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

#### **SERVICE**

- 23. Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 24. When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of electric shock or injury.

**USE PROPER EXTENSION CORD:** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Ampere Rating		Volts Total length of cord in feet				et
		120 V	25 ft.	50 ft.	100 ft.	150 ft.
More Than	Not More Than			AWG		
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Reco	mmended

Table 1: Minimum gage for cord

#### SPECIFIC SAFETY RULES

USB002-2

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to hammer drill safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

- Hold tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- Always be sure you have a firm footing. Be sure no one is below when using the tool in high locations.
- Hold the tool firmly with both hands. Always use the side grip.

- 4. Keep hands away from rotating parts.
- Do not leave the tool running.Operate the tool only when hand-held.
- Do not touch the bit or the workpiece immediately after operation; they may be extremely hot and could burn your skin.

The followings show the symbols used for tool.

 Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.

#### SAVE THESE INSTRUCTIONS

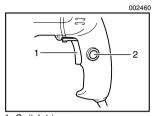
#### **∴ WARNING:**

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

SYMBOLS USD202-2

<b>V</b> volts	n。no load speed
<b>A</b> amperes	☐Class II Construction
<b>Hz</b> hertz	/minrevolutions or reciprocation per
	C⊨number of blow

# FUNCTIONAL DESCRIPTION



Switch trigger
 Lock button

#### **↑** CAUTION:

 Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

#### Switch action

#### **↑** CAUTION:

- Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.
- Switch can be locked in "ON" position for ease of operator comfort during extended use. Apply caution when locking tool in "ON" position and maintain firm grasp on tool.

To start the tool, simply pull the switch trigger. Tool speed is increased by increasing pressure on the switch trigger. Release the switch trigger to stop.

For continuous operation, pull the switch trigger and then push in the lock button.

To stop the tool from the locked position, pull the switch trigger fully, then release it.

# 002448 A O B

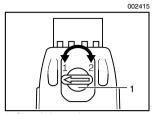
1. Reversing switch lever

#### Reversing switch action

This tool has a reversing switch to change the direction of rotation. Move the reversing switch lever to the  $\cap$  position (A side) for clockwise rotation or the  $\cap$  position (B side) for counterclockwise rotation.

#### **△ CAUTION:**

- Always check the direction of rotation before operation.
- Use the reversing switch only after the tool comes to a complete stop. Changing the direction of rotation before the tool stops may damage the tool.



1. Speed change lever

#### Speed change

Two speed ranges can be preselected with the speed change lever.

To change the speed, turn the speed change lever to the position 1 for low speed or the position 2 for high speed. If the speed change lever does not turn easily, turn the chuck slightly in either direction and turn the lever again.

Be sure that the speed change lever is set to the correct position before operation. Use the right speed for your job.

#### **↑** CAUTION:

- Always set the speed change lever fully to the correct position. If you operate the tool with the speed change lever positioned halfway, the tool may be damaged.
- Do not use the speed change lever while the tool is running. The tool may be damaged.

# 002421

1. Action mode changing lever

#### Selecting the action mode

This tool has an action mode changing lever.

For rotation with hammering, turn the lever to the position of  $\ensuremath{\mathbb{T}}$  symbol.

For rotation only, turn the lever to the position of § symbol.

#### **⚠** CAUTION:

 Always turn the action mode changing lever fully to your desired mode position. If you operate the tool with the lever positioned halfway between the mode symbols, the tool may be damaged.

#### **ASSEMBLY**

# 002430

### 5

- 2. Teeth
- 3. Grip base
- 4. Side arip
- 5. Protrusion (B)

1. Protrusion (A)

#### **⚠** CAUTION:

 Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

#### Installing side grip (auxiliary handle)

Always use the side grip to ensure operating safety. Install the side grip so that the teeth on the grip fit in between the protrusions (A) on the tool barrel. Then tighten the grip by turning clockwise at the desired position. It may be swung  $360^{\circ}$  so as to be secured at any position.

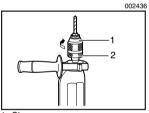
To remove the side grip, loosen it by turning counterclockwise. Then push the grip base away from the tool barrel to disengage it from the protrusions (B).

#### Installing or removing drill bit

#### For Model HP2031

Hold the ring and turn the sleeve counterclockwise to open the chuck jaws. Place the bit in the chuck as far as it will go. Hold the ring firmly and turn the sleeve clockwise to tighten the chuck.

To remove the bit, hold the ring and turn the sleeve counter-clockwise.



1. Sleeve

2. Ring

# 002459

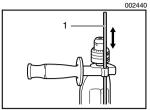
1. Chuck key

#### For Model HP2030

To install the bit, place it in the chuck as far as it will go. Tighten the chuck by hand. Place the chuck key in each of the three holes and tighten clockwise. Be sure to tighten all three chuck holes evenly.

To remove the bit, turn the chuck key counterclockwise in just one hole, then loosen the chuck by hand.

After using the chuck key, be sure to return to the original position.



1. Depth gauge

#### Depth gauge

The depth gauge is convenient for drilling holes of uniform depth. Loosen the side grip and insert the depth gauge into the hole in the side grip. Adjust the depth gauge to the desired depth and tighten the side grip.

#### NOTE:

 The depth gauge cannot be used at the position where the depth gauge strikes against the tool body.

#### **OPERATION**

#### Hammer drilling operation

#### **↑** CAUTION:

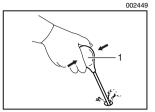
• There is a tremendous and sudden twisting force exerted on the tool/bit at the time of hole break-through, when the hole becomes clogged with chips and particles, or when striking reinforcing rods embedded in the concrete. Always use the side grip (auxiliary handle) and firmly hold the tool by both side grip and switch handle during operations. Failure to do so may result in the loss of control of the tool and potentially severe injury.

When drilling in concrete, granite, tile, etc., turn the action mode changing lever to the position of  $\[mathbb{T}\]$  symbol to use "rotation with hammering" action.

Be sure to use a tungsten-carbide tipped bit.

Position the bit at the desired location for the hole, then pull the switch trigger. Do not force the tool. Light pressure gives best results. Keep the tool in position and prevent it from slipping away from the hole.

Do not apply more pressure when the hole becomes clogged with chips or particles. Instead, run the tool at an idle, then remove the bit partially from the hole. By repeating this several times, the hole will be cleaned out and normal drilling may be resumed.



Blow-out bulb

#### Blow-out bulb (optional accessory)

After drilling the hole, use the blow-out bulb to clean the dust out of the hole.

#### **Drilling operation**

#### **△ CAUTION:**

- Pressing excessively on the tool will not speed up the drilling. In fact, this excessive pressure will only serve to damage the tip of your bit, decrease the tool performance and shorten the service life of the tool.
- There is a tremendous force exerted on the tool/bit at the time of hole break through. Hold the tool firmly and exert care when the bit begins to break through the workpiece.
- A stuck bit can be removed simply by setting the reversing switch to reverse rotation in order to back out. However, the tool may back out abruptly if you do not hold it firmly.
- Always secure small workpieces in a vise or similar holddown device.

When drilling in wood, metal or plastic materials, turn the action mode changing lever to the position of  $\hat{\mathbf{g}}$  symbol to use "rotation only" action.

#### **Drilling in wood**

When drilling in wood, the best results are obtained with wood drills equipped with a guide screw. The guide screw makes drilling easier by pulling the bit into the workpiece.

#### **Drilling in metal**

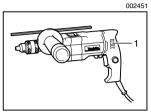
To prevent the bit from slipping when starting a hole, make an indentation with a center-punch and hammer at the point to be drilled. Place the point of the bit in the indentation and start drilling.

Use a cutting lubricant when drilling metals. The exceptions are iron and brass which should be drilled dry.

#### **MAINTENANCE**

#### **↑** CAUTION:

 Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.



1. Vent holes

#### Cleaning vent holes

The tool and its air vents have to be kept clean. Regularly clean the tool's air vents or whenever the vents start to become obstructed.

To maintain product SAFETY and RELIABILITY, repairs, carbon brush inspection and replacement, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

#### **ACCESSORIES**

#### **↑** CAUTION:

 These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita service center.

- Drill bits
- Hammer drill bits
- Blow-out bulb
- Safety goggles
- · Chuck key
- Grip assembly
- Depth gauge
- Plastic carrying case

Memo			

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La Mirada, CA 90638-5753

Hdallaallaalldalalddaladdalallalall

# **MAIL THIS PORTION**

#### Your answers to the following questions are appreciated.

1. This product was purchased from:  Home Center Other ( Hardware/Lumber Store Tool Distributor Industrial Supply Construction Supply 2. Use of the product is intended for:	3. How did you learn about this product:  Magazine Radio From Dealer Exhibition Newspaper From Friend Store Display Previous Usage Catalog Other ( )  4. Most favored points are:
Construction Trade Industrial Maintenance Home Maintenance Hobby Other ( )  5. Any comments:	Design Repair Service Features Durability Size Power Price Other ( ) Makita Brand
DATE PURCHASED	MODEL NO.
MONTH DAY YEAR	
INTL. LAST NAME / COMPANY NAME	STATUS SEX Married Single M F
STREET ADRESS	
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12701 Directors Dr. Stafford, TX 77477-3701 (281) 565-8665

3453 IH-35 North, Ste. 101 San Antonio, TX 78219 (210) 228-0676

#### WISCONSIN

Lincoln Plaza Shopping Ctr. 2245 S. 108th St. West Allis, WI 53227 (414) 541-4776

#### **CUSTOMER'S RECORD**

When you need service: Send complete tool (prepaid) to one of the Makita Factory Service	Date Purchased
	Dealer's Name & Address
Centers listed, or to an Authorized Makita Service Center. Be sure	
to attach a letter to the outside of the carton detailing the problem with your tool.	Model No.
	Serial No.

## **WARNING**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

#### MAKITA LIMITED ONE YEAR WARRANTY

#### Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others:
- repairs are required because of normal wear and tear:
- the tool has been abused, misused or improperly maintained:
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

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